

REMARKS

Claims 22-70 are pending in the Application and all stand rejected in the final Office action mailed April 14, 2009. No claims are amended by this response. Claims 22, 44, and 63 are independent claims from which claims 23-43, 45-62, and 64-70 depend, respectively. Applicants respectfully request withdrawal of the finality of the instant Office action, and reconsideration of the pending claims, in light of the remarks set forth below.

The Applicants note that a goal of patent examination is to provide a prompt and complete examination of a patent application.

It is **essential** that patent applicants obtain a prompt yet complete examination of their applications. Under the principles of compact prosecution, each claim should be reviewed for compliance with every statutory requirement for patentability in the initial review of the application, even if one or more claims are found to be deficient with respect to some statutory requirement. Thus, USPTO personnel should state all reasons and bases for rejecting claims in the first Office action. Deficiencies should be explained clearly, particularly when they serve as a basis for a rejection. Whenever practicable, USPTO personnel should indicate how rejections may be overcome and how problems may be resolved. **A failure to follow this approach can lead to unnecessary delays in the prosecution of the application.**

M.P.E.P. §2106(II) (emphasis added).

As such, the Applicants assume, based on the goals of patent examination noted above, that the current Office Action sets forth “all reasons and bases” for rejecting the claims.

Applicants urge the Examiner to carefully review the arguments presented and to contact the undersigned with any questions or to discuss ways to further the Application towards allowance, in order to avoid the need to appeal the rejections to the Board of Patent Appeals and Interferences.

Rejection of Claims

Claims 22-32, 34, 36-41, 43-59, 61, and 62 were rejected under 35 U.S.C. 102(e) as being anticipated by Sharman (US H1641). Claims 33 and 60 were rejected under 35 U.S.C. 103(a) as being unpatentable over Sharman in view of Rahnema (US 5,465,253). Claim 35 was rejected under 35 U.S.C. 103(a) as being unpatentable over Sharman in view of Baumert, et al. (US 5,392,281, hereinafter "Baumert"). Claim 42 was rejected under 35 U.S.C. 103(a) as being unpatentable over Sharman in view of Endo (US 6,453,351). Claims 63-70 were rejected as being unpatentable under 35 U.S.C. §103(a) over Sharman in view of Regnier (US 6,345,047). Applicants respectfully traverse the rejections.

As an initial matter, the Office action states, at page 16, that "Applicant's arguments have been fully considered but they are not persuasive." Applicants respectfully note, however, that a review of the instant Office action shows that in some of the rejections, the cited portions of the disclosure of Sharman that are alleged to teach or suggest Applicants' claim elements have changed. Applicants respectfully submit therefore that, contrary to the statement by the Office, the new selection/interpretation of the teachings of Sharman that resulted in the observed changes to the rejections would seem to indicate that *something* in Applicants' previous response was persuasive, *to at least some extent*.

I. Sharman Does Not Anticipate Claims 22-32, 34, 36-41, 43-59, 61, And 62.

Claims 22-32, 34, 36-41, 43-59, 61, and 62 were rejected under 35 U.S.C. 102(e) as being anticipated by Sharman (US H1641). Applicants respectfully maintain that Sharman does not teach each and every element of Applicants' claims 22-32, 34, 36-41, 43-59, 61, and 62, as required by M.P.E.P. §2131.

With regard to the anticipation rejections, MPEP 2131 states, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). (emphasis added) MPEP 2131 also states, "[t]he identical invention must be shown in

as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). (emphasis added) **Therefore, a *prima facie* case of anticipation is not supported by mere conclusory statements, or by ignoring aspects of the claims, but requires that the Office show where all elements of the claims, including the recited structure, are taught by a single piece of prior art.**

With regard to independent claim 22, Applicants respectfully submit that Sharman does not teach or suggest, at least, "a host interface supporting the communication of status and control information between the information transmission device and a host device compatible with the host interface, the host interface permitting management of the information transmission device by the host device." Applicants respectfully submit that Sharman does not teach or suggest at least this element of Applicants' claim 22.

The Office states, at page 3, "Sharman teaches an information transmission device (**mobile routing network 101, Figs. 1 and 2**) for communicatively coupling at least one packet network (**packet data network 108, Fig. 1**) to at least one communication network having an associated information format (**circuit switched network 103, Fig. 1**), the device comprising: ... a host interface supporting the communication of status and control information between the information transmission device and a host device, the host interface permitting management of the information transmission device by a host device compatible with the host interface (**packet protocol control 805 connects host computer 812 with the network system for controlling, sending and receiving data. Mobile end system control 813 controls the operation of mobile end system 102, Fig. 8 and Col. 7 Lines 60-63**)." (emphasis in original) Thus, Applicants respectfully submit that the Office has identified the "mobile routing network 101," "packet protocol control 805," and "host computer 812" of Sharman as teaching Applicants' claimed "information transmission device," "host interface," and "host device," respectively. If Applicants have misread the teachings identified by the Office, Applicants respectfully request that the Office more clearly identify the teachings of Sharman corresponding to each element of Applicants' claim 22, in any subsequent Office action, if one is issued.

Applicants respectfully submit that the “packet protocol control 805” does not teach or suggest Applicants’ “host interface,” as claimed. Applicants respectfully note that Applicants’ claim 22 requires “an information transmission device” that comprises, *inter alia*, “a host interface” that “permit[s] management of the information transmission device by the host device.” Applicants respectfully submit that “packet protocol control 805”, which the Office identified as teaching Applicants’ “host interface” is shown as part of the “mobile end system” of Fig. 8, which is located at the bottom of Fig. 1. Applicants respectfully note that the “mobile routing network 101”, which the Office identified as teaching Applicants’ “information transmission device” is a separate element located at the top of Fig. 1. Therefore, Applicants respectfully submit that the element of Sharman identified by the Office as teaching Applicants’ “information transmission device” does not comprise the element of Sharman identified by the Office as teaching Applicants’ “host interface,” as required by claim 22. As previously noted, M.P.E.P. §2131 recognizes that “[t]he identical invention **must** be shown in as complete detail as is contained in the ... claim.” Applicants respectfully submit that Sharman does not teach at least this aspect of Applicants’ claim 22 and therefore does not teach each and every element of claim 22, as required by M.P.E.P. §2131. Therefore, Applicants respectfully submit that Sharman does not anticipate Applicants’ claim 22 for at least the above reasons.

Applicants’ claim 22 is allowable over Sharman for an additional reason. Applicants’ claim 22 recites, in part, “the host interface permitting management of the information transmission device by the host device.” Applicants respectfully submit that Sharman does not teach at least this aspect of claim 22. Applicants respectfully note that the Office states, in part, at page 3, “...(packet protocol control 805 connects host computer 812 with the network system for controlling, sending and receiving data. Mobile end system control 813 controls the operation of mobile end system 102, Fig. 8 and Col. 7 Lines 60-63.)” (underline added) Thus, the Office seems to recognize that “packet protocol control 805” connects “host computer 812” with the network system for controlling, sending and receiving data.” That is, Sharman discloses that “host computer 812” is connected to the “network system” by “packet protocol control 805.” Further, the connection between “host computer 812” and the

“network system” is for controlling, sending, and receiving data. Applicants respectfully submit that the cited portion of Sharman at col. 7, lines 60-63 merely discloses what is shown above in bold, and that neither cited Fig. 8, nor col. 7, lines 60-63 teach or suggest the “packet protocol control 805”, which the Office identified as corresponding to Applicants’ “host interface,” as “permitting management of the information transmission device by the host device,” as claimed. Instead, Sharman teaches that “[a] host computer 812 is connected to packet protocol control 805 to control, send, and receive data.” Thus, at most, the cited portion of Sharman teaches the control, sending, and receiving of data, by the “host computer 812” using the “packet protocol control 805” cited by the Office. Sharman is silent with respect to the “host computer 812,” which the Office identified as teaching Applicants’ “host device,” managing the “mobile routing network 101,” which was identified by the Office as teaching Applicants’ “information transmission device.” Thus, the teachings of Sharman at Fig. 8 and col. 7, lines 60-63, which were specifically selected by the Office, do not teach “the host interface permitting management of the information transmission device by the host device,” as claimed. Therefore, Applicants respectfully submit that claim 22 is allowable over Sharman for at least this additional reason.

With regard to dependent claim 30, Applicants respectfully submit that Sharman does not teach or suggest, at least, “wherein the at least one converter converts digitized voice information into an analog voice signal, and an analog voice signal into digitized voice information,” as claimed. Claims 57 and 59 recite similar features. The Office states, in part, at page 5, “Sharman teaches wherein the at least one converter converts digitized voice information into an analog voice signal, and an analog voice signal into digitized voice information (**modem 406, Col. 9 Lines 57-67**).” (emphasis in original) Applicants respectfully note that the Office asserts that Sharman teaches conversion of an “analog voice signal.” Applicants respectfully disagree, and submit that the Office is continuing to misinterpret the disclosure of Sharman. Applicants addressed the cited portion of Sharman at pages 19-20 of the response filed February 2, 2009. Applicants will not repeat the entirety of that response here, but hereby incorporate Applicants’ earlier arguments herein as though set forth in full. Applicants

also offer additional comments regarding the cited portion of Sharman at col. 9, lines 57-67, shown below:

Modem 406 converts data received over a data link 413 from a packet encoder 408 to an analog signal that is transmitted to circuit switch 407, and converts analog signals received from circuit switch 407 to data that is sent to a packet decoder 405 via a data link 414. Modem 406 may additionally include appropriate forward error correction, retransmission, and compression logic if desired. Many suitable modem devices with these capabilities are available, with link layer protocols such as Microcom's MNP 4, MNP 5, and MNP 10 protocols, or the CCITT V.42 or V.42bis standards.

The cited portion of Sharman shown above teaches that “modem 406” converts data to an “analog signal,” and converts “analog signals” to data, and may include “appropriate forward error correction, retransmission, and compression logic.” However, Applicants respectfully note that the cited portion of Sharman shown above does not teach or suggest conversion of data to/from an “analog voice signal” and the conversion of an “analog signal” to/from “digitized voice information,” as asserted by the Office. Applicants respectfully submit that the mere mention of an “analog signal” does not teach or suggest an “analog voice signal”, nor does a simple reference to “data” teach or suggest “digitized voice information,” as claimed. Applicants again respectfully note that the Office identifies “modem 406” as teaching Applicants’ “at least one convertor.” Applicants respectfully submit that a modem may be defined as follows:

A communications device that enables a computer to transmit information over a standard telephone line. Because a computer is digital (works with discrete electrical signals representing binary 1 and binary 0) and a telephone line is analog (carries a signal that can have any of a large number of variations), modems are needed to convert digital to analog and vice versa. When transmitting, modems impose (modulate) a computer's digital signals onto a continuous carrier frequency on the telephone line. When receiving, modems sift out (demodulate) the information from the carrier and transfer it in digital form to the computer. Sophisticated modems are also capable of such functions as automatic dialing, answering, and redialing in addition to

transmitting and receiving. Without appropriate communications software, however, modems cannot perform any useful work.

(See Microsoft Press Computer Dictionary - Third Edition, © 1997 Microsoft Corporation, pp. 311-312)

Thus, a recognized authority in the relevant art teaches a “modem” as a device that when transmitting “impose[s] (modulate[s]) a computer's digital signals onto a continuous carrier frequency on the telephone line” and when receiving, “sift[s] out (demodulate[s]) the information from the carrier and transfer it in digital form to the computer.” Applicants respectfully submit that although a “standard telephone line” communicates analog voice band signals, one of ordinary skill in the relevant art at the time of the invention would unquestioningly acknowledge that such signals are not limited only to analog voice signals. While a “modem” may send and receive “analog voice band signals” over a “standard telephone line,” there is nothing in Sharman, nor in the definition of “modem” (published by a recognized authority in the relevant art), that teaches or suggests that a modem converts digitized voice information into an analog voice signal, and an analog voice signal into digitized voice information, as claimed. Further, while the cited portion of Sharman teaches that “suitable modem devices” that include such as “Microcom's MNP 4, MNP 5, and MNP 10 protocols, or the CCITT V.42 or V.42bis standards,” the Office fails to show where any of these modem protocols support the conversion of “digitized voice information” to/from “analog voice signal,” as claimed. Therefore, for at least these reasons, Applicants respectfully submit that cited “modem 406” and col. 9, lines 57-67 of Sharman do not teach or suggest at least this aspect of Applicants’ claim 30 for at least the above reasons, in addition to the reasons previously set forth, and that claim 30 is independently allowable over Sharman.

In response to Applicants’ arguments set forth in the response filed February 2, 2009 to the Office action mailed September 26, 2008, the Office states, in part, at page 18:

Applicant argues that Sharman's modem 406 does not convert digitized voice signals to analog signals and vice versa because Sharman does not explicitly recite “digitized voice information.” Sharman teaches at column 9 Lines 54-

67 that modem 406 operates by converting data received over a data link to an analog signal transmitted to a circuit switch, and that circuit switch 407 couples a telephone circuit 109 to the modem 406. A telephone circuit serves only to carry voice signals, therefore Sharman's modem signals must comprise digital voice signals, which teaches applicant's digitized voice information.

Applicants strongly disagree with this response of the Office, and respectfully submit that the Office fails to provide any support for the conclusory statement that “[a] telephone circuit serves only to carry voice signals, therefore Sharman's modem signals must comprise digital voice signals, which teaches applicant's digitized voice information.” (emphasis added) Applicants respectfully submit that the Office is confusing “voice signals” and “voice band signals”. While an ordinary telephone circuit is normally designed to carry “voice band signals”, there are many “voice band signals” carried by ordinary telephone circuits that are not “voice signals,” including those such as “modem signals,” “dual-tone multifrequency (DTMF) signals,” “dialtone,” “busy signals,” to name only a few. Therefore, it is not true that a “telephone circuit serves only to carry voice signals,” as asserted by the Office, without support.

Further, although not explicitly stating such, the assertion by the Office that “Sharman's modem signals must comprise digital voice signals,” without the identification of any support in any reference for such an assertion, amounts to nothing less than an assertion that it is inherent that any signal carried on a telephone circuit must be a voice signal. Applicants respectfully disagree. As shown above, a number of non-voice signals are in use over telephone circuits.

According to MPEP §2112, Sec. IV, page 2100-54,55, “[t]o establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is **necessarily** present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances **is not sufficient**.” (emphasis added) “In relying upon the theory of inherency, the examiner **must** provide a basis in fact and/or technical reasoning to

reasonably support the determination that the allegedly inherent characteristic **necessarily** flows from the teachings of the applied prior art. *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990).” MPEP 2112 (emphasis in original).

Therefore, Applicants respectfully submit that the Office has failed to establish a *prima facie* case of anticipation, in that the Office has failed to identify any support for its rejection, and has also failed to meet the requirements for an assertion of inherency.

Based at least upon the above, Applicants respectfully submit that Sharman does not teach or suggest, at least, “wherein the at least one converter converts digitized voice information into an analog voice signal, and an analog voice signal into digitized voice information,” as claimed, and that claim 30 is independently allowable over Sharman, for at least the reasons previously set forth, and those presented above.

With regard to dependent claims 31 and 32, Applicants respectfully submit that Sharman does not teach or suggest, at least, “[t]he device of claim 30 wherein the at least one converter buffers digitized voice information for a predefined period of time to minimize gaps in an analog voice signal,” as recited by claim 31, and “[t]he device of claim 31 wherein the predefined period of time is based upon a propagation delay of a communication network,” as recite by claim 32. Claim 58 recites features similar to those of claim 31.

With respect to claim 31, the Office states, in part, at page 5, “Sharman teaches wherein the at least one converter buffers digitized voice information for a predefined period of time to minimize gaps in an analog voice signal (**buffers 403 and 404 , Fig. 4 and Col. 10 Lines 8-10**).” (emphasis in original) Applicants respectfully maintain that Applicants’ claim 31 recites that the “at least one converter,” which the Office asserts is taught by the “modem 406” of Sharman, buffers the “digitized voice information”. Applicants respectfully submit, however, that the “buffers 403 and 404”, specifically identified by the Office, are not taught by Sharman as part of the “modem 406.” Therefore, “buffers 403 and 404” do not teach that the “modem 406” buffers “digitized voice information” for a “predefined period of time to minimize gaps in an analog voice

signal,” as claimed. Applicants have previously addressed this argument by the Office. See above and response filed February 2, 2009 to Office action of September 26, 2008 at pages 21-22. Applicants respectfully submit that claim 31 is allowable for at least those reasons.

In addition, Applicants respectfully note that the Office has not shown where all of the elements of claim 31 are taught by Sharman, namely, “wherein the at least one converter buffers digitized voice information for a predefined period of time to minimize gaps in an analog voice signal,” as claimed. The Office merely identifies “buffers 403 and 404” of Sharman, but fails to even address, let alone show where Sharman teaches or suggests where “buffers 403 and 404” buffer digitized voice information “for a predefined period of time to minimize gaps in an analog voice signal,” as claimed.

Further, Applicants respectfully submit that Sharman discloses, at col. 13, lines 44-48, “[a]s noted earlier, the time to live field in the packets stored in transmit buffer 403 and receive buffer 404 will be decremented periodically, and when they reach zero the packet will be removed from transmit buffer 403 or receive buffer 404 and discarded.” (emphasis added) Thus, Sharman teaches that packets will be removed from the “transmit buffer 403” or “receive buffer 404” and discarded. Applicants respectfully submit that such behavior of discarding packets is the opposite of what is claimed by the Applicants, in that discarding packets in the “receive buffer 404” would be expected by those of ordinary skill in the relevant art to cause the loss of digitized voice information, causing gaps in the analog signal reproduced from the received packets. Thus, Applicants respectfully submit that Sharman’s disclosure of discarding packets causes gaps, rather than minimizing gaps, as claimed, and thus teaches away from Applicants’ claim feature. Therefore, for at least these reasons, Applicants respectfully submit that claim 31 is allowable over Sharman.

In response to Applicants’ arguments of the response filed February 2, 2009, the Office states, at page 18 of the instant Office action:

Applicant argues that Sharman cannot teach the converter with buffers because Sharman's buffers are not part of the modem. However, Sharman's modem and buffers are comprised in the mobile data circuit switch 208, which

corresponds to applicant's converter. Applicant further argues that Sharman's maximum time buffering cannot teach the predefined buffer time because Sharman teaches a maximum time to live in the packet headers. However, the time to live can be set to take into account packet transit time and buffering time, which corresponds to applicant's predefined buffer time.

Applicants' respectfully note that, contrary to the identification of the "modem 406" as teaching Applicants' claimed element "at least one converter" in rejecting claim 22 (from which claims 31 and 32 depend), in both the instant Office action and the Office action of September 26, 2008, the "Response to Arguments" presented by the Office now asserts the "mobile data circuit switch 208" of Sharman teaches Applicants' claimed "at least one converter." Applicants respectfully submit that this inconsistent interpretation of the Sharman reference does not support a *prima facie* case of anticipation, and that claim 31 is allowable for at least that reason alone. Further, even if Applicants were to agree that the entirety of the "mobile data switch 208" of Sharman corresponded to Applicants' claimed "at least one converter," **which Applicants do not**, Applicants respectfully submit that the Office still has not shown where Sharman teaches all of the features of Applicants' claim 30, from which claim 31 depends. Therefore, Applicants respectfully submit that claim 31 is allowable over Sharman, for at least these reasons.

With respect to claim 32, the Office states, in part, at page 5, "Sharman teaches wherein the predefined period of time is based upon a propagation delay of a communication network (**maximum time to live, Col. 10 Lines 11-15**)." (emphasis in original) Initially, Applicants respectfully submit that claim 32 depends from claim 31 and is allowable over Sharman for at least the reasons set forth above with respect to claim 31, and the claims from which claim 31 depends. Applicants now address Sharman at col. 10, lines 8-15, which include the cited portion at lines 11-15, underlined below:

Transmit buffer 403 stores packet data received from destination mobile packet router 210 over data link 218 until to it can be transmitted to mobile end system 102, or for a

maximum time. The maximum time is determined by analysis of the data content of the data in the transmit buffer. As outlined here the packet data will conform to the Internet IP protocol, and a maximum time to live is contained in these packet headers.

(emphasis added)

This cited portion of Sharman clearly states that “[t]he maximum time is determined by analysis of the data content of the data in the transmit buffer,” and that “the packet data will conform to the Internet IP protocol, and a maximum time to live is contained in these packet headers.” Applicants respectfully submit that the Office has misinterpreted what is represented by the “time to live” parameter in IP headers, and that this parameter is not a time, but a number of routers. According to page 206 of “TCP/IP: Running a Successful Network - Second Edition” by Kevin Washburn and Jim Evans, © 1996, Addison Wesley Longman, “[t]he Time To Live (TTL) field is set by the datagram sender and is decremented by datagram routers as the datagram passes through them. If this action reduces the TTL to 0 the datagram is discarded rather than relayed. This prevents datagrams that get routed in a loop from circulating forever. A router should never receive a datagram that has TTL set to zero.” In other words, the parameter named “time to live” is a misnomer in that the parameter is not a time at all, but is instead a maximum number of routers that may be passed through before the datagram will be discarded. Applicants respectfully submit that, as shown above, the discarding of packets when “TTL” is decremented to zero teaches away from Applicants’ claim 31 and 32. Therefore, for at least these reasons, Applicants respectfully submit that Sharman does not teach or suggest Applicants’ claim 32, and that claim 32 is allowable over Sharman.

In response to Applicants’ arguments of the response of February 2, 2009 to the Office action mailed September 26, 2008, the Office states, in part, at page 18, “Applicant further argues that Sharman's maximum time buffering cannot teach the predefined buffer time because Sharman teaches a maximum time to live in the packet headers. However, the time to live can be set to take into account packet transit time and buffering time, which corresponds to applicant's predefined buffer time.” Applicants respectfully disagree. Initially, Applicants respectfully note that, again, the Office argues

without providing evidence of any support in the reference for the assertions. As previously noted, M.P.E.P. §2132 makes clear that “[a] claim is anticipated **only** if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” (emphasis added) Further, Applicants respectfully submit that as noted above, the cited “time to live” parameter is misnamed in that it is not a time, but is a maximum number of routers to be traversed by a datagram before the datagram is discarded by the network. Even further, the Office fails to provide support for the assertion that “the time to live can be set to take into account packet transit time and buffering time, which corresponds to applicant's predefined buffer time.” The Office fails to identify anything from Sharman that supports such an assertion.

Applicants respectfully request, should the Office maintain this rejection, that the Office explain where, how, and why Sharman teaches that the sending entity, which sets the value of the time to live, would be able to “take into account packet transit time and buffering time, which corresponds to applicant's predefined buffer time,” as asserted by the Office. **If, instead, this assertion is base upon personal knowledge of the Examiner, Applicants respectfully request that the Examiner place in the record an affidavit attesting to such personal knowledge, as required by 37 C.F.R. §1.104.** Until such support is provided, based at least upon the above, Applicants respectfully submit that the Office has not presented a *prima facie* case of anticipation, as required by M.P.E.P. §2131, and that claim 32 is allowable over Sharman.

With regard to dependent claim 25, Applicants respectfully maintain that Sharman does not teach or suggest, at least, “wherein the information exchanged via the at least one packet interface comprises digitized voice information,” as claimed. Claim 47 recites similar features. The Office states, in part, at page 4, “Sharman teaches wherein the information exchanged via the at least one packet interface comprises digitized voice information **(audio path switch connects packet data processor with audio processor and its attached speaker and microphone, Col. 7 Lines 52-54).**” (emphasis in original) Applicants respectfully disagree, and submit that

the Office is misinterpreting the teachings of Sharman. Applicants have previously addressed the alleged teachings of the cited portion of Sharman at col. 7, lines 52-54 in the response filed February 2, 2009 at pages 18-19. Applicants will not repeat those arguments again here, but hereby incorporates Applicants' response of February 2, 2009 regarding the rejection of claim 25, in its entirety. Applicants respectfully submit that claim 25 is allowable over Sharman for additional reasons.

Sharman discloses, at col. 5, line 54 to col. 6, line 2:

Referring first to FIG. 1, the network system of the present invention comprises four primary devices: a mobile end system 102, a telephone access gateway 104, a local area network access gateway 107, and a mobile routing network 101. Components of the system that derive substantially from prior art are a fixed telephone 124, a circuit switched network 103, a packet data network 108, a cellular packet data system 106, a cellular switch system 105, and a fixed end system 125. The network system is designed to route data packets bidirectionally between mobile end system 102 and fixed end system 125, and also between mobile end system 102 and other similar mobile end systems of similar design. The network system is also designed to connect switched circuits between mobile end system 102 and fixed telephone 124, and also between mobile end system 102 and other mobile systems of similar design.

(emphasis added)

Thus, the underlined portion of Sharman teaches that "switched circuits" are used for calls involving a "fixed telephone 124". Further, Sharman teaches that "[a] fixed telephone 124 has been shown throughout, however many other devices can reasonably be substituted, including facsimile devices, voice mail, pagers, or switched circuit modems." See *id.* at col. 16, lines 49-52. Thus, Applicants respectfully submit that Sharman teaches that "switched circuits" carry (analog) voice band signals, not packets of "digitized voice information." Applicants respectfully submit that Sharman provides a detailed description of the handling of a "switched circuit" call in the network system of Sharman in explaining the flowchart of Fig. 9, which Sharman describes as "a flowchart of the procedure executed by the mobile end system for handling incoming

switched circuit calls.” See *id.* at col. 5, lines 47-49. Applicants now review Sharman’s description of Fig. 9, which appears at col. 16, lines 2-46, reproduced below:

FIG. 9 shows a flowchart for the procedure followed by mobile end system control 813 when it receives a voice call from mobile data circuit switch 208. This procedure entails the transmission of signalling packets mixed with packet data, using the signalling packets to offer the voice call to the user. The incoming call is received, and mobile end system control 813 answers in block 901. Following the call setup procedures from TIA RS-553 for an incoming cellular call, if applicable, the mobile end system control 813 tunes a cellular radio 811 to the voice channel. In block 902 mobile end system control 813 enables a cellular channel processor 808, or telephone access interface 801, and establishes a path through an audio path switch 802 to a modem and packet processor 807, and initiates a modem training handshake for modem and packet processor 807. In block 903 a packet is received by modem and packet processor 807. Mobile end system control 813 inspects the packet in blocks 904 and 906. If it is not a signalling packet it is delivered to a packet protocol processor 805 for processing according to the Internet IP protocol specification. Call setup packets are interpreted by mobile end system control 813. In block 907 an indication of the incoming call is provided. This indication may be an audio ringing tone generated by an audio processor 803 and sounded in a handset 804, a status indication to a host computer 812, or other indication to higher level software or the user that a voice call is being offered. Mobile end system control 813 then waits in block 908 for the call to be answered by the user or host computer in block 909. It then sends an answer signalling packet from modem and packet processor 807 to the cellular circuit radio channel 119, to be subsequently communicated to mobile data switch 208, which signals answer supervision on incoming telephone circuit 604. In block 911 mobile end system control 813 disconnects the modem path through audio patch switch 802, connecting cellular circuit channel processor 808 to audio processor 803. The switched circuit is then complete, and in the case of a voice call the user can then talk and listen through handset 804. If the call is not answered by the user after a selectable time delay, or mobile end system 102 determines that it cannot accept the call at this time, for example if higher layer data communication protocols have priority for communications, a disconnect

signalling message is sent to mobile data switch 208 in block 913 and packet data communication is resumed.

The portion of Sharman shown above teaches that when a voice call is received, signalling packets are used to offer the voice call to the user. An indication may be an audio ringing tone generated by “audio processor 803” and sounded in “handset 804,” a status indication to a “host computer 812,” or other indication to higher level software or the user that a voice call is being offered. “Mobile end system control 813” then waits for the call to be answered. If the call is answered, the “mobile end system control 813” **disconnects the modem path** through the “audio patch switch 802”, and connects “cellular circuit channel processor 808” to “audio processor 803.” The “switched circuit” is then complete. If the call is not answered after a selected time delay or the call cannot be accepted, **packet data communication is resumed**. Thus, Sharman teaches that when a “switched circuit” for a voice call (which communicates voice band signals) is complete, the “modem path” is disconnected. That is, the “modem 406” of Sharman is not a part of the voice call. Applicants respectfully submit that this removes the element from the voice call path that the Office asserts teaches Applicants’ “at least one converter,” eliminating the alleged ability to convert “analog voice signals” to “digitized voice information,” as required by Applicants’ claim 25. **If the Office feels that Applicants have misinterpreted the teachings of Sharman, Applicants respectfully request that the Office specifically identify the errors in Applicants’ arguments above, providing specific citation to the relevant lines of Sharman, explaining why Applicants are mistaken, and how and why the Office is interpreting Sharman in the manner selected.** Therefore, as shown above, Applicants again respectfully submit that Sharman does not teach all of the elements of Applicants’ claim 25, and that claim 25 is independently allowable over Sharman for at least this additional reason.

In response to Applicants’ arguments of February 2, 2009 in response to the Office action mailed September 26, 2008, the Office states, in part, at page 17:

Applicant argues that Sharman does not teach exchanging digitized voice information via the packet

interface because Sharman does not explicitly recite "digitized voice information." Sharman teaches that the audio path switch 802 may connect either cellular circuit channel processor 808 or cellular packet data channel processor 809 to either audio processor 803 and its attached speaker or to modem and packet processor 807. What is transmitted between the cellular packet data channel processor 809 and the audio processor 803 and its attached speaker and microphone when they are connected via audio path switch 802 **must** comprise digitized voice since the cellular packet data channel processor's packets are inherently digital and thus cannot directly modulate an analog carrier wave, and the audio processor's attached speaker and microphone serve only to reproduce voice signals. Therefore the signals being exchanged **must** comprise digital voice signals, which teaches applicant's digitized voice information.

(emphasis added)

Applicants respectfully submit that the Office has misinterpreted the disclosure of Sharman at col. 7, lines 49-55, which Applicants respectfully submit is missing a word, "respectively." Applicants have show above that voice calls do not involve the use of the "modem 406" of Sharman, which the Office has asserted teaches the required conversion between analog and digital forms of voice. In light of the disclosure regarding Fig. 9, Applicants respectfully submit that the portion of Sharman at col. 7, lines 49-55, should be read as "Switched circuit paths from telephone access interface 801 and cellular circuit channel processor 808 are switched by an audio path switch 802, which connects either cellular circuit channel processor 808 or cellular packet data channel processor 809 to either an audio processor 803 and its attached speaker and microphone, shown as a handset 804, or to a modem and packet processor 807, **respectively.**" That is, **either** the "cellular circuit channel processor 808" is connected to "an audio processor 803 and its attached speaker and microphone, shown as a handset 804", **or** "cellular packet data channel processor 809" is connected to "a modem and packet processor 807." This interpretation is consistent with the discussion describing the flowchart of Fig. 9 of Sharman addressed above.

Therefore, based at least upon the above, Applicants respectfully submit that the Office has not shown where Sharman teach each and every element of Applicants' claim 22, has not established a *prima facie* case of anticipation with respect to claim 22,

as required by M.P.E.P. §2131, that Sharman does not anticipate claim 22 or any of claims 23-43 that depend therefrom, and that claim 22 and its dependent claims are allowable over Sharman. Further, Applicants have shown that at least dependent claims 30, 31, and 32 are independently allowable over Sharman. Accordingly, Applicants respectfully request that the rejection of claims 22-32, 34, 36-41, and 43 under 35 U.S.C. §102(e) be reconsidered and withdrawn.

With regard to independent claim 44, Applicants respectfully submit that Office has not established a *prima facie* case of anticipation with respect to claim 44, or any of claims 45-62 that depend therefrom. Applicants maintain that claim 44 recites some of the same features, and is allowable over Sharman for at least some of the reasons set forth above with respect to the rejection of independent claim 22.

In addition, Applicants respectfully submit that claim 44 recites, in part, “receiving, from one of the packet network and the at least one communication network, information requesting setup of a call between the packet network and the at least one communication network.” Applicants respectfully submit that Sharman does not teach or suggest at least this aspect of claim 44. The Office states, at page 7, “Sharman teaches ... receiving, from one of the packet network and the at least one communication network, information requesting setup of a call between the packet network and the at least one communication network **(mobile end system 813 receives voice call, Col. 16 Lines 2-4).**” (emphasis in original) Applicants respectfully disagree. Sharman at col. 16, lines 2-4 are shown below:

FIG. 9 shows a flowchart for the procedure followed by mobile end system control 813 when it receives a voice call from mobile data circuit switch 208. This procedure entails...

Applicants respectfully submit that there is no mention of any “information requesting setup”, let alone “...information requesting setup of a call between the packet network and the at least one communication network,” as claimed. The Office does not specifically identify what in the cited portion of Sharman teaches Applicants’

“information requesting setup of a call,” nor does the Office explain how a “voice call” might represent “information” requesting setup of a call. Not only does the cited portion of Sharman not mention “information” that requests setup of a call, there is nothing in the cited portion of Sharman that discloses anything that requests setup of a voice call between a packet network and another network. There is no mention of a packet network, or how a “voice call” allegedly received by the “mobile end system [sic, control] 813” requests call setup specifically involving a packet network, as claimed. Therefore, Applicants respectfully submit that the cited portion of Sharman at col. 16, lines 2-4 does not teach “receiving, from one of the packet network and the at least one communication network, information requesting setup of a call between the packet network and the at least one communication network,” as recited by claim 44. Applicants respectfully note that M.P.E.P. §2131 is clear, “[a] claim is anticipated **only** if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” Therefore, Applicants respectfully submit that claim 44 is allowable over Sharman for at least this reason.

In addition, Applicants’ claim 44 recites, in part, “providing, to a host device, at least a portion of the information requesting setup of a call,” **and** “receiving, from the host device, configuration information based upon the at least a portion of the information requesting setup of a call.” Applicants respectfully submit that the Office has failed to show that Sharman teaches these aspects of Applicants’ claim 44, as well. The Office states, in part, at pages 7-8, “Sharman teaches ... providing, to a host device, at least a portion of the information requesting setup of a call (**incoming indication, Col. 16 Lines 23-28**); receiving, from the host device, configuration information based upon the at least a portion of the information requesting setup of a call (**it then sends an answer signaling packet to the mobile data switch for signaling answer supervision, Col 16 Lines 30-34**).” (emphasis in original) Applicants respectfully disagree.

The Office seems to be asserting that a voice call received by “mobile end system 813” teaches Applicants’ “information requesting setup of a call,” and that the “mobile end system control 813” corresponds to Applicants’ claimed “host device.” The Office does not explain how the “incoming indication”, which col. 16, lines 23-28 of

Sharman teach is provided by the “mobile end system control 813”, is “at least a portion of the information requesting setup of a call,” that is received by the “mobile end system control 813.” This discrepancy is even more clear when one considers the portion of the cited text of Sharman that states, “[t]his indication may be an audio ringing tone generated by an audio processor 803 and sounded in a handset 804, a status indication to a host computer 812, or other indication to higher level software or the user that a voice call is being offered.” Further, the Office has not explained how “an answer signaling packet to the mobile data switch for signaling answer supervision” sent by the “mobile end system control 813” teaches “configuration information based upon the at least a portion of the information requesting setup of a call,” as recited by Applicants’ claim 44. Applicants respectfully submit that there is nothing in the cited portion of Sharman at col. 16, lines 30-34, that teaches “configuration” or “configuration information,” or that the “answering signaling packet” is based upon at least a portion of information requesting setup of a call between a packet network and at least one communication network, as required by Applicants’ claim 44. Therefore, for at least the reasons set forth above, Applicants respectfully submit that the Office has not met the requirements of M.P.E.P. §2131 necessary to establish a *prima facie* case of anticipation, and that claim 44, and any claim that depends therefrom, is allowable over Sharman.

Base at least upon the above, Applicants respectfully submit that claim 44, and claims 45-62 that depend therefrom, are allowable over Sharman. In addition, Applicants respectfully submit that claim 47 and claims 57 and 59 are independently allowable over Sharman for the reasons set forth above with respect to claims 25 and 30. Accordingly, Applicants respectfully request that the rejection of claims 44-59, 61, and 62 under 35 U.S.C. §102(e) be reconsidered and withdrawn.

II. The Proposed Combination Of Sharman And Rahnema Does Not Render Claims 33 And 60 Unpatentable

Claims 33 and 60 were rejected under 35 U.S.C. 103(a) as being unpatentable over Sharman in view of Rahnema. Applicants respectfully submit that claims 33 and 60 depend from independent claims 22 and 44, respectively. Applicants respectfully

submit that claims 22 and 44 are allowable over the proposed combination of references, in that the Office has failed to show where Rahnema overcomes the shortcomings of Sharman, noted above. Because claims 22 and 44 are allowable over Sharman and Rahnema, Applicants respectfully submit that claims 33 and 60 that depend therefrom are also allowable, for at least the same reasons. Accordingly, Applicants respectfully request that the rejection of claims 33 and 60 under 35 U.S.C. §103(a) be reconsidered and withdrawn.

III. The Proposed Combination Of Sharman And Baumert Does Not Render Claim 35 Unpatentable

Claim 35 was rejected under 35 U.S.C. 103(a) as being unpatentable over Sharman in view of Baumert. Applicants respectfully submit that claim 35 depends from independent claim 22. Applicants respectfully submit that claim 22 is allowable over the proposed combination of references, in that the Office has failed to show where Baumert overcomes the shortcomings of Sharman, as set forth above. Because claim 22 is allowable over Sharman and Baumert, Applicants respectfully submit that claim 35 that depends therefrom is also allowable, for at least the same reasons. Accordingly, Applicants respectfully request that the rejection of claim 35 under 35 U.S.C. §103(a) be reconsidered and withdrawn.

IV. The Proposed Combination Of Sharman And Endo Does Not Render Claim 42 Unpatentable

Claim 42 was rejected under 35 U.S.C. 103(a) as being unpatentable over Sharman in view of Endo. Applicants respectfully submit that claim 42 depends from independent claim 22. Applicants respectfully submit that claim 22 is allowable over the proposed combination of references, in that the Office has failed to show where Endo remedies the deficiencies of Sharman, discussed above. Because claim 22 is allowable over Sharman and Baumert, Applicants respectfully submit that claim 42 that depends therefrom is also allowable, for at least the same reasons. Accordingly, Applicants respectfully request that the rejection of claim 42 under 35 U.S.C. §103(a) be reconsidered and withdrawn.

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V. The Proposed Combination Of Sharman And Regnier Does Not Render Claims 63-70 Unpatentable

Claim 63-70 were rejected under 35 U.S.C. 103(a) as being unpatentable over Sharman in view of Regnier. Applicants respectfully submit that independent claim 63 recites elements also recited by independent claims 22 and 44. The Office supports the rejection of claim 63 citing portions of Sharman which Applicants have shown do not teach these elements. Applicants further respectfully submit that claim 63 is allowable over the proposed combination of references, in that the Office has not shown how Regnier overcomes the relevant shortcomings of Sharman, set forth above. Further, Applicants believe that claim 69 is independently allowable, for at least the reasons set forth above with respect to claim 25. Accordingly, Applicants respectfully request that the rejection of claims 63-70 under 35 U.S.C. §103(a) be reconsidered and withdrawn.

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Conclusion

In general, the Office Action makes various statements regarding the claims of the Application and the cited references that are now moot in light of the above. Thus, Applicants will not address such statements at the present time. However, Applicants expressly reserve the right to challenge such statements in the future should the need arise (e.g., if such statements should become relevant by appearing in a rejection of any current or future claim).

The Applicants believe that all of pending claims 22-70 are in condition for allowance. Should the Examiner disagree or have any questions regarding this submission, the Applicants invite the Examiner to telephone the undersigned at (312) 775-8000.

A Notice of Allowability is courteously solicited.

The Commissioner is hereby authorized to charge any fees required by this submission to the Deposit Account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

Respectfully submitted,

Dated: June 15, 2009

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